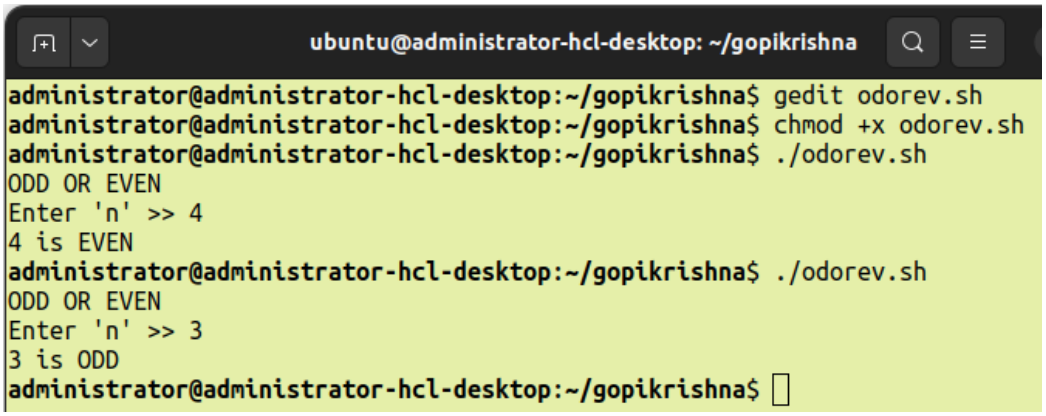
3.1>>ODD OR EVEN

```
echo "ODD OR EVEN"
echo -n "Enter 'n' >> "
read n
if [ $((n%2)) -eq 0 ]; then
        echo "$n is EVEN"
else
        echo "$n is ODD"
fi
```

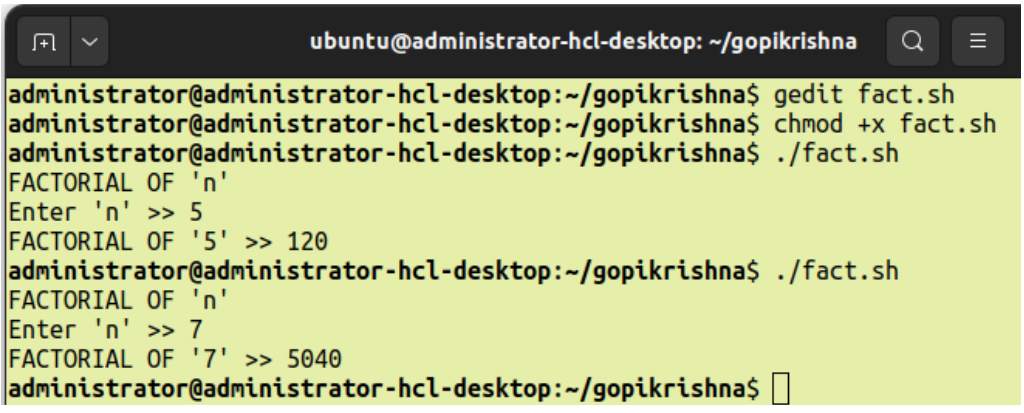
OUTPUT



3.2>>FACTORIAL OF A NUMBER

```
echo "FACTORIAL OF 'n'"
echo -n "Enter 'n' >> "
read n
fact=1
z=0
if [ $n == $z ] ; then
        echo "FACTORIAL OF 0 >> 1"
else
        for((i=2;i<=n;i++))
        do
                fact=$((fact*i))
        done
fi
echo -n "FACTORIAL OF '$n' >> $fact"
echo
```

OUTPUT



3.3>>FIBONACCI SERIES

```
echo "FIBONACCI SERIES"
n1=0
n2=1
n3=$((n1+n2))
echo -n "Enter Limit >> "
read lim
echo -n "FIBONACCI SERIES upto $lim >> "
echo -n "$n1 $n2"
for (( i=3 ; i <= lim ; ++i ))
do
        echo -n " $n3"
        n1=$n2
        n2=$n3
        n3=$((n1+n2))
done
echo
```

OUTPUT